RIVER STAGES AND FLOODS FOR NOVEMBER 1947

ELMER R. NELSON

Precipitation during November was above normal in the eastern two-thirds of the United States except in Maine, the upper Great Lakes region, and along a narrow belt extending southwestward from the lower Great Lakes region through the central portion of Texas. In the remaining one-third of the country it was below normal except in eastern Oregon, the northern portions of Nevada and Utah, western Idaho, the southeastern tip of Washington, and the southwestern corner of Montana. Rainfall was comparatively heavy in a broad area along the Atlantic from Pennsylvania through the Southern States. It was also heavy over Minnesota, South Dakota, and Wyoming. The precipitation in these areas ranged from 1½ to 3 times the normal seasonal amounts. Near-drought conditions were prevalent again over Maine except in the extreme southeastern portion.

Stream flow was excessive in the Southern States over a broad region extending from the Mississippi River to the Atlantic coast, but no damaging floods were reported. In southern Florida, run-off continued excessive as stages receded slowly following the October floods. Streams continued low over most of New England for the third consecutive month. Over the central and southern Great Plains stream flow continued subnormal for the second consecutive month, while in the West there was a general

trend toward normal seasonal run-off.

Atlantic Slope drainage—The moderate to heavy precipitation that occurred on the first 4 days of the month in the Atlantic Coast States caused minor overflows in some of the river basins from Virginia southward to Georgia. The rainfall was especially heavy over New Jersey; the eastern portions of Pennsylvania, Maryland, and Virginia; and the northeastern tip of North Carolina. It was moderately heavy over most of South Carolina, the central portion of Georgia, and the sandhills of North The first overflow since June 1946 occurred in the Washington River District on the Rapidan River at Rapidan, Va., on the 4th. Minor overflows occurred on the Roanoke and Cape Fear Rivers in North Carolina, the Pee Dee, Saluda, Broad, Catawba, and Wateree Rivers in South Carolina. The small disturbance that developed over Alabama on the 11th of the month was accompanied by generally heavy rains and caused additional minor overflows along some of the rivers in North Carolina, South Carolina, and Georgia. Monthly rainfall totals at many stations in Georgia were the greatest on record for any November. The rainfall in that area was frequent, with numerous heavy falls through the Apalachicola and Altamaha River systems. The principal losses in the Atlantic Slope drainage area during the month were to logging interests.

East Gulf of Mexico drainage.—The rainfall in November was frequent in occurrence, with numerous heavy falls in the Apalachicola River system which caused that river to be slightly over flood stage from the 15th through the

30th at Blountstown, Fla.

West Gulf of Mexico drainage.—The Sabine River at Mineola, Tex., went 2 feet above flood stage on the 28th. No damage was reported.

Pacific Slope drainage.—In the Pacific Northwest minor flooding occurred in the Columbia, Puyallup, and the Snohomish River basins. The only damage was that due to erosion.

FLOOD STAGE REPORT FOR NOVEMBER 1947 [All dates in November unless otherwise specified]

[All dates in Noveme	er unies	ss otherwise	specineal		
River and station	Flood stage	Above flood stages—dates		Crest 1	
		From-	То	Stage	Date
ATLANTIC SLOPE DRAINAGE	Feet			Feet	
Rapidan: Rapidan, Va	14	4	4	15. 2	4
Randolph, Va	ĺ	f 6	5 6	23, 2 31, 6	5 6
Weldon, N. C	31	13	13	33.0	13
Williamston, N. C. Tar: Rock's Mount, N. C. Neuse:	10 8	8 14	(2)	11.3 8.2	20-21 14-15
Neuse, N. C	14	13 21	17 21	16.7 14.0	14 21
Smithfield, N. C.	13	j 5	5	13, 2	5
	14	\ 12 13	(2)	17. 0 18. 0	17 21
Goldsboro, N. C. Kinston, N. C.	14	15	(2) (3)	16.7	27 13-14
Cape Fear: Lock No. 2, Elizabethtown, N. C.	20	$\left\{\begin{array}{c} 12 \\ 20 \end{array}\right\}$	20 22	$\left\{\begin{array}{c} 25,8\\ 25,0\\ 20,8 \end{array}\right.$	13-14 17 21
Pee Dee: Pee Dee, S. C	19	6	27	$\left\{\begin{array}{c} 20.0 \\ 20.7 \end{array}\right.$	9 20
Saluda: Pelzer, S. C.	6	f 2	4	6.4	3
Chappells, S. C	13	16	16 11	6. 0 13. 2	16 11
Broad: Blairs, S. C.	14	$\left\{ egin{array}{c} 3 \\ 12 \\ 16 \end{array} \right $	13 16	18. 1 15. 5 14. 0	$\frac{4}{12}$
Catawba:		1	_		
Catawba, N. C	8 11 23	3 3 4	4 4 5	11. 9 14. 6 24. 9	3 4 4
Edisto:				-	
Orangeburg, S. C	8	[13	15	8.1	13
	10	17 13	(2)	8. 1 11. 7	18 25
Givhans Ferry, S. C. Ogeechee: Dover, Ga.	7	13	(2)	8.0	24
Ocmulgee: Abbeville, Ga Oconee: Milledgeville, Ga	$\frac{11}{20}$	19	12	11.9 21.6	21 12
Altamaha:	12	14	(2)	17. 2	27
Charlotte, Ga Piney Bluff, Ga	17	23	(2) (2)	19. 0	26 k:
EAST GULF OF MEXICO DRAINAGE			1	ŀ	Cale.
Apalachicola: Blountstown, Fla	15	15	(2)	17. 2	23
WEST GULF OF MEXICO DRAINAGE					<u> </u>
Sabine: Mineola, Tex	14	25	29	16.0	28
PACIFIC SLOPE DRAINAGE			i	- 1	
Columbia Basin			ļ		
Santiam: Jefferson, Oreg Willamette: Harrisburg, Oreg	13 12	8 16 15	9 16 16	13. 7 13. 8 12. 2	8 16 15
Puyallup Basin			•		
Puyallup: Electron Headworks, Wash.	7. 9	7	8	8. 2	7
Snohomish Basin					
Snoqualmie: Tolt, Wash	51.8 20	$\left\{\begin{array}{cc} & 7 \\ & 11 \\ 7 \end{array}\right $	9 11 11	54. 0 52. 0 25. 4	8 11 8

¹ Provisional. ² Continued at end of month.